This Documentation, which includes embedded help systems and electronically distributed materials (hereinafter referred to as the “Documentation”), is for your informational purposes only and is subject to change or withdrawal by erwin Inc. at any time. This Documentation is proprietary information of erwin Inc. and may not be copied, transferred, reproduced, disclosed, modified or duplicated, in whole or in part, without the prior written consent of erwin Inc.

If you are a licensed user of the software product(s) addressed in the Documentation, you may print or otherwise make available a reasonable number of copies of the Documentation for internal use by you and your employees in connection with that software, provided that all erwin Inc. copyright notices and legends are affixed to each reproduced copy.

The right to print or otherwise make available copies of the Documentation is limited to the period during which the applicable license for such software remains in full force and effect. Should the license terminate for any reason, it is your responsibility to certify in writing to erwin Inc. that all copies and partial copies of the Documentation have been returned to erwin Inc. or destroyed.

TO THE EXTENT PERMITTED BY APPLICABLE LAW, ERWIN INC. PROVIDES THIS DOCUMENTATION “AS IS” WITHOUT WARRANTY OF ANY KIND, INCLUDING WITHOUT LIMITATION, ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NONINFRINGEMENT. IN NO EVENT WILL ERWIN INC. BE LIABLE TO YOU OR ANY THIRD PARTY FOR ANY LOSS OR DAMAGE, DIRECT OR INDIRECT, FROM THE USE OF THIS DOCUMENTATION, INCLUDING WITHOUT LIMITATION, LOST PROFITS, LOST INVESTMENT, BUSINESS INTERRUPTION, GOODWILL, OR LOST DATA, EVEN IF ERWIN INC. IS EXPRESSLY ADVISED IN ADVANCE OF THE POSSIBILITY OF SUCH LOSS OR DAMAGE.

The use of any software product referenced in the Documentation is governed by the applicable license agreement and such license agreement is not modified in any way by the terms of this notice.

The manufacturer of this Documentation is erwin Inc.

Provided with “Restricted Rights.” Use, duplication or disclosure by the United States Government is subject to the restrictions set forth in FAR Sections 12.212, 52.227-14, and 52.227-19(c)(1) - (2) and DFARS Section 252.227-7014(b)(3), as applicable, or their successors.

Copyright © 2017 erwin Inc. All rights reserved. All trademarks, trade names, service marks, and logos referenced herein belong to their respective companies.
Contact erwin

Understanding your Support

Review support maintenance programs and offerings.

Registering for Support

Access the erwin support site and click Sign in to register for product support.

Accessing Technical Support

For your convenience, erwin provides easy access to "One Stop" support for all editions of erwin Data Modeler, and includes the following:

- Online and telephone contact information for technical assistance and customer services
- Information about user communities and forums
- Product and documentation downloads
- erwin Support policies and guidelines
- Other helpful resources appropriate for your product

For information about other erwin products, visit http://erwin.com/products.

Provide Feedback

If you have comments or questions, or feedback about erwin product documentation, you can send a message to techpubs@erwin.com.

erwin Data Modeler News and Events

Visit www.erwin.com to get up-to-date news, announcements, and events. View video demos and read up on customer success stories and articles by industry experts.
## Contents

### Chapter 1: erwin Data Modeler Editions
- Standard Edition .......................................................................................................... 9
- Workgroup Edition ........................................................................................................ 10
- Navigator Edition ......................................................................................................... 11
- Academic Edition ......................................................................................................... 11
- Sample Model ............................................................................................................. 12

### Chapter 2: New Features and Enhancements
- Microsoft SQL Server Support ..................................................................................... 15
- PostgreSQL Support ...................................................................................................... 16
- Hadoop Hive Support ..................................................................................................... 16
- Cloud-based Licensing Service ..................................................................................... 16
- Report Designer ........................................................................................................... 16
- erwin DM NoSQL Support .......................................................................................... 16
- IIS Port Number Configuration ..................................................................................... 16
- Teradata Support .......................................................................................................... 17
- SAP ASE Support ........................................................................................................ 17
- Oracle Support ............................................................................................................ 17
- Productivity Enhancements ......................................................................................... 17
- Metadata Integration Bridges Updates ......................................................................... 18
- Password Policy .......................................................................................................... 21

### Chapter 3: System Information
- Release Numbering Scheme in erwin Data Modeler ................................................. 23
- Operating System Support .......................................................................................... 24
- System Requirements .................................................................................................. 25
- Administrative Privileges Required ............................................................................ 26
- Supported Target Databases ....................................................................................... 27
  - Limitations in Hive ..................................................................................................... 28
- erwin Data Modeler Workgroup Edition Requirements .............................................. 28
  - Administrator Server System Requirements ............................................................ 28
  - DBMS Requirements ............................................................................................... 29
  - Client Workstation Requirements ........................................................................... 30
- erwin Data Modeler Navigator Edition Requirements ............................................... 30
  - Support for erwin Data Modeler Navigator Edition ............................................... 30
Chapter 4: Installation Considerations for erwin Data Modeler Workgroup Edition

erwin Data Modeler and Mart Release Numbers ................................................................. 31
Microsoft SQL Server 2005 onward Permissions ............................................................ 31
Specify Use of Foreign Characters With Microsoft SQL Server ....................................... 32

Chapter 5: Installation Considerations for erwin Data Modeler Navigator Edition

Silent Install .......................................................................................................................... 33

Chapter 6: General Considerations for Using erwin Data Modeler Workgroup Edition

Model Display in the Difference Reconciliation Dialog ....................................................... 35
Uninstalling erwin Data Modeler Workgroup Edition ....................................................... 35

Chapter 7: General Considerations for Using erwin Data Modeler Navigator Edition

Model Display in the Difference Reconciliation Dialog ....................................................... 37
Help Files .............................................................................................................................. 37

Chapter 8: Known Issues

Unhandled Exception for Mart Upgrade Utility ................................................................... 39
SQL 1105 Error .................................................................................................................... 39
API Functions not Working for SAP ASE Mart .................................................................. 40
Model and Version Name Limit on Oracle ......................................................................... 40
.Net Requirement ................................................................................................................ 40
Report on Glossary Words Includes Extra Characters ...................................................... 40
Updating Profile Description from Notepad ....................................................................... 40
Unwanted Result Rows in Report ...................................................................................... 40
DSM Logical to SQL Server 2012 ....................................................................................... 41
Report Designer Functions for a Large Model .................................................................... 41
Subject Area Picture Report not Generated ....................................................................... 41
Incorrect UDP in UDP Report ........................................................................................... 41
Invalid Column Node for DB2 LUW Model in View Report .............................................. 41
Mart Server Name in Korean .............................................................................................. 42
Generating Reports with Korean Characters in User Name .............................................. 42
Error While Creating a Profile Using Special Characters in Mart Administrator .............. 43
File IO: For a Parent or Child Table with Multiple Child Tables, Other Child FK Attributes are Highlighted on Mouse Hover on One Relationship ................................................................. 43
Owner Name not Displayed while Sorting a Guided Editor’s list of Objects ........................................ 43

Chapter 9: Fixed Issues 45
Issues Fixed in this Release ............................................................................................................ 46

Chapter 10: Documentation 57
Documentation ............................................................................................................................ 57
Technical Documentation Series ............................................................................................. 59
Release Numbers ...................................................................................................................... 59

Appendix A: Appendix 61
Third Party Software Acknowledgment .................................................................................... 61
Chapter 1: erwin Data Modeler Editions

The following editions of erwin Data Modeler are available:

- **Academic Edition** (see page 11)
- **Standard Edition** (see page 9)
- **Workgroup Edition** (see page 10)
- **Navigator Edition** (see page 11)

This *Release Notes* details new features, enhancements, updates, and known issues for all editions of erwin Data Modeler.

**Note:** Depending on the edition of erwin Data Modeler you are using, not all features may be enabled for use. For more information about the differences between versions, click one of the Edition links.

This section contains the following topics

- **Standard Edition** (see page 9)
- **Workgroup Edition** (see page 10)
- **Navigator Edition** (see page 11)
- **Academic Edition** (see page 11)
- **Sample Model** (see page 12)

### Standard Edition

erwin Data Modeler Standard Edition provides all the data modeling features used by Data Architects, Data Administrators, and Application Administrators, but does not include any workgroup modeling capabilities. You can use this edition as a standalone modeling tool, and as a Workgroup Edition client that can access and work with data models stored in a mart. When you enable data movement or dimensional modeling features, it provides a tool for assisting Data Administrators and Capacity Managers design data warehouses. Partners can use the API to create add-on solutions to erwin Data Modeler.
Workgroup Edition

erwin Data Modeler Workgroup Edition provides all the data modeling features used by Data Architects and also includes workgroup modeling capabilities used by Database Administrators, Application Administrators, and Application Owners. It provides conflict resolution, versioning, security and standardization for multi-user modeling. Workgroup modeling operates in a client/server environment so processing is shared between the user client workstation and the server where the models are stored. Users access the stored models through a client, such as erwin Data Modeler. Models are held in a platform and network independent database or mart that resides on a central server, using Microsoft SQL Server, Oracle, Microsoft SQL Azure, or SAP ASE as the host database.

The key features of erwin Data Modeler Workgroup Edition include:

Web-based administrator (erwin Mart Administrator)

Helps the administrator administer the Mart. The administrator creates the Mart database, installs and configures erwin Mart Administrator before users can connect to the Mart. erwin Mart Administrator is hosted on a web server and is accessed through an Internet browser.

Model change impact analysis

Provides a change summary showing the impact of changes and the history of the affected model objects, allowing you to select which changes to apply to the model repository.

Version management

Lets Data Architects store, access and analyze the history of a model and the changes made to it, lock down specific versions, run difference reports between versions, and seamlessly roll back models to previous states as required.

Concurrent model access with optional model locking

Allows multiple users to concurrently work on a given model without compromising the integration and integrity of their parallel efforts.

The administrator installs the program and initializes the database on the DBMS server. The administrator also has the responsibility of setting up the library structure in which models are organized, and assigning security profiles to users. Administration overhead is relatively low and proportional to the number and activity level of the users. After a model is saved to the database, control of who can work on the model and how changes are saved to the model is handled by security, making it possible for workgroups to work on large models without confusion. erwin Data Modeler Workgroup Edition supports many security and administrative features related to its multiuser capabilities and the client/server environment in which it operates. For this reason, routine management is usually performed by a dedicated administrator. Administrators can find detailed information regarding their tasks and responsibilities in the erwin Data Modeler Workgroup Edition Administration Guide.
You can also use erwin Data Modeler Navigator Edition as a client. Read-only access is permitted to data models, so your workgroup can use this client to share information with others without the risk that unauthorized changes might be saved to the mart.

**Navigator Edition**

erwin Data Modeler Navigator Edition provides a cost-effective way to provide read-only access to models built with erwin Data Modeler for viewing and analysis. This edition does not permit you to make any changes to models.

The key features of erwin Data Modeler Navigator Edition include:

**Read-only access**

Read-only access is provided to models created by erwin Data Modeler and it can also be used as a Workgroup Edition client for viewing a data model stored in a mart. Use the Navigator Edition to easily share model information without the risk of unauthorized changes to a model.

**Navigation and Viewing**

Provides those who need to view models, but not update them, full navigation and viewing of data models.

**Reporting and Publication**

Offers reporting and printing capabilities that generate in a variety of formats, including HTML and PDF.

**Academic Edition**

The Academic Edition is a time-limited edition and includes a limited number of features from the main product. It is designed to help students to learn creating simple data models.
Sample Model

When you install erwin® Data Modeler, two sample models, eMovies and PublicationSystemSample are installed. Use these models as examples to learn data modeling and to learn how to use the tool.

These models are available in the following folder:

<install folder>\erwin\Data Modeler r9\BackupFiles\Samples\Standard

Note: If you access the sample model from the install folder, you must run the data modeling tool as an administrator to open the eMovies model.

eMovies

The business requirements of this model are as follows:

■ Manage employee details
■ Manage store details
■ Manage movie details
■ Manage copies of movies
■ Manage customer details
■ Maintain movie rental details for customers
■ Record payment details for rented movies
■ Display the credit status of customers
■ Generate invoices for customers
■ Display overdue details for customers
■ Search for customers
■ Search for movies that are rented based on the rented date, customer phone number, employee number, or movie number

Apart from entities, attributes, and relationships, this model serves as an example for the following features:

■ Domains
■ Logical Model
■ Subject Area
■ Annotation
■ Key Groups
■ ER Diagrams
■ Naming Standards Object
■ Data Type Standards Object
■ Themes
■ Validation Rules

PublicationSystemSample

The PublicationSystemSample model provides an example of a book publication company.

The business requirements of this model are as follows:

■ Diagrams
  The Diagrams can be easily shared with other project team members by exporting them to .EMF format during project analysis. The diagrams also support project communication using the Report Designer and different diagram presentation options while viewing models in the erwin Web Portal.

■ Documentation
  This object serves as an example for the following features:
  ■ Model
  ■ Diagram
  ■ Subject Area
  ■ Entity
  ■ Attribute
  ■ Theme override options
  ■ Diagram Annotations
Chapter 2: New Features and Enhancements

This section contains the following topics:

- Microsoft SQL Server Support (see page 15)
- PostgreSQL Support (see page 16)
- Hadoop Hive Support (see page 16)
- Cloud-based Licensing Service (see page 16)
- Report Designer (see page 16)
- erwin DM NoSQL Support (see page 16)
- IIS Port Number Configuration (see page 16)
- Teradata Support (see page 17)
- SAP ASE Support (see page 17)
- Oracle Support (see page 17)
- Productivity Enhancements (see page 17)
- Metadata Integration Bridges Updates (see page 18)
- Password Policy (see page 21)

Microsoft SQL Server Support

erwin Data Modeler now supports several features of SQL Server versions 2012, 2014, and 2016, as follows:

- SQL Server 2012 onward:
  - File Tables
- SQL Server 2014 onward:
  - Memory Optimized Tables
  - Natively Compiled Stored Procedures
  - Clustered ColumnStore Index
- SQL Server 2016 onward:
  - Always Encrypted Columns
  - Temporal Tables
  - Natively Compiled Scalar Functions
PostgreSQL Support

erwin Data Modeler now supports PostgreSQL 9.6.2 and is certified to work with PostgreSQL 9.6.5.

Note: Reverse Engineering from Script (RES) is not supported.

Hadoop Hive Support

erwin Data Modeler has added native support for Hadoop Hive 2.1.x as a target database. This implementation supports both, MySQL and PostgreSQL metastores.

Note: For FE or Alter Script process, on the Hive Connection dialog, always set the Metastore Database to Default and the ODBC Data Source to relevant Hive connection driver.

Cloud-based Licensing Service

erwin now uses a cloud-based software licensing service to cater to licenses for all the erwin Data Modeler (DM) editions. For more information, refer to the Licensing topic in the erwin Installation Guide.

Report Designer

The Report Designer now lets you customize the colors for PDF reports.

erwin DM NoSQL Support

erwin Data Modeler supports connection to erwin DM NoSQL the File menu, where you can model and manage your unstructured cloud data.

IIS Port Number Configuration

erwin Data Modeler and Mart Server now let you configure Mart on a port other than the default port, 80.
Teradata Support

erwin Data Modeler is now certified to work with Teradata v16.10.

SAP ASE Support

erwin Data Modeler is now certified to work with SAP ASE 16 SP02.

Oracle Support

erwin Data Modeler is now certified to work with Oracle 12c R2.

Productivity Enhancements

The overall productivity of erwin Data Modeler has been enhanced with the following functionalities and workflows:

- **DDL preview in table editors**: Displays the forward engineering script preview (table, comments, partitions, and physical storage) on the SQL tab of the table editor

- **Subject Area switching for Viewer profile**: Allows switching to a subject area even in case of a Viewer profile

- **PK/FK highlighting**: Highlights the primary and foreign keys on hovering the mouse over a relationship line

- **Incremental Save progress**: Displays a progress bar for an incremental save. Also, if another user tries to save into the same model, a message is displayed, which informs about the progress of other user's save operation.
Metadata Integration Bridges Updates

erwin Data Modeler has been updated to support several new import Metadata Integration Bridges as follows:

1. Alteryx - Beta Bridge
2. Alteryx Repository - Beta Bridge
3. Amazon S3 - Beta Bridge
4. Apache Hadoop Hive Database (Hive Metastore via JDBC) - Beta Bridge
5. Apache Avro Database Files (JSON)
6. Apache CouchDb Database (JSON)
7. Microsoft SQL Server Database SQL DDL - Beta Bridge
8. Teradata Database SQL DDL
9. File System - Beta Bridge
10. Apache Hadoop HBase Database (Java API)
11. Actian Vector (Vectorwise) Database (via JDBC)
12. HP Vertica Database (via JDBC)
13. Microsoft Azure SQL Database (via JDBC)
14. Oracle MySQL Database (via JDBC)
15. MarkLogic NoSQL Database (for JSON only)
16. Apache Parquet Database Files
17. QlikSense
18. Talend Data Preparation

Also, the following Metadata Integration Bridges have been renamed:

- **Import Bridges**

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apache Cassandra - New Beta bridge</td>
<td>Apache Cassandra Database</td>
</tr>
<tr>
<td>DataStax Enterprise (Cassandra) - New Beta bridge</td>
<td>DataStax Enterprise (Cassandra)</td>
</tr>
<tr>
<td>Apache Hadoop Hive Server</td>
<td>Apache Hadoop Hive Database (HCatalog via JDBC)</td>
</tr>
<tr>
<td>Source</td>
<td>Target</td>
</tr>
<tr>
<td>---------------------------------------------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Cloudera Enterprise Hadoop Hive Server</td>
<td>Cloudera Enterprise Hadoop Hive Database (HCatalog via JDBC)</td>
</tr>
<tr>
<td>Hortonworks Hadoop Hive Server</td>
<td>Hortonworks Hadoop Hive Database (HCatalog via JDBC)</td>
</tr>
<tr>
<td>MapR Hadoop Hive Server</td>
<td>MapR Hadoop Hive Database (HCatalog via JDBC)</td>
</tr>
<tr>
<td>COBOL Copybook File</td>
<td>COBOL Copybook Database Files</td>
</tr>
<tr>
<td>Database SQL Data Definition Language (DDL)</td>
<td>Database SQL Data Definition Language (DDL) - Beta Bridge</td>
</tr>
<tr>
<td>Oracle Database SQL DDL</td>
<td>Oracle Database SQL DDL</td>
</tr>
<tr>
<td>Flat File Database (CSV or Excel)</td>
<td>Flat File Database (CSV or Excel) - Beta Bridge</td>
</tr>
<tr>
<td>Google BigQuery</td>
<td>Google BigQuery Database</td>
</tr>
<tr>
<td>JSON (JavaScript Object Notation) Files</td>
<td>JSON Database Files</td>
</tr>
<tr>
<td>MicroStrategy MDX Adapter (via ODBO)</td>
<td>MicroStrategy MDX Adapter (via ODBO) - Unsupported EOL Bridge</td>
</tr>
<tr>
<td>SAP NetWeaver Business Warehouse (BW) (via ODBO)</td>
<td>SAP NetWeaver Business Warehouse (BW) (via ODBO) - Unsupported EOL Bridge</td>
</tr>
<tr>
<td>SAS OLAP Server (via ODBO)</td>
<td>SAS OLAP Server (via ODBO) - Unsupported EOL Bridge</td>
</tr>
<tr>
<td>Microsoft SQL Server Analysis Services (SSAS) 2005 to 2012 (Repository)</td>
<td>Microsoft SQL Server Analysis Services (SSAS) 2005 to 2014 (Repository)</td>
</tr>
</tbody>
</table>
## Metadata Integration Bridges Updates

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft SQL Server Analysis Services (SSAS) 2005 to 2012 (File)</td>
<td>Microsoft SQL Server Analysis Services (SSAS) 2005 to 2014 (File)</td>
</tr>
<tr>
<td>MongoDB - New Beta bridge</td>
<td>MongoDB Database (JSON)</td>
</tr>
<tr>
<td>OMG CWM Pre-1.0 XMI 1.1</td>
<td>OMG CWM Pre-1.0 XMI 1.1 - Unsupported EOL Bridge</td>
</tr>
<tr>
<td>Oracle Business Intelligence (OBI) Server</td>
<td>Oracle Business Intelligence (OBI) Repository (RPD file)</td>
</tr>
</tbody>
</table>

### Export Bridges

<table>
<thead>
<tr>
<th>Old Name</th>
<th>New Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>OMG CWM Pre-1.0 XMI 1.1</td>
<td>OMG CWM Pre-1.0 XMI 1.1 - Unsupported EOL Bridge</td>
</tr>
<tr>
<td>SAP PowerDesigner OOM 9.x to 15.x (via UML 1.x XMI)</td>
<td>SAP PowerDesigner OOM 9.x to 15.x (via UML 2.x XMI)</td>
</tr>
</tbody>
</table>
Password Policy

The password policy for erwin has been updated. A password should fulfill the following criteria:

- Contains at least 1 lowercase character
- Contains at least 1 uppercase character
- Contains at least 1 number
- Is minimum 6 characters in length
- Is maximum 130 characters in length

Apart from the above criteria, special characters are optional. This validation is applicable to reset, change, and forgot password processes.

Also, if you enter an incorrect password five consecutive times, your account will be locked for five minutes (300 seconds) by default.

While upgrading from 9.x to 9.8, if the existing password does not meet the updated password policy, you will be redirected to change the password.
Chapter 3: System Information

Review the following system information before installing and using the product.

This section contains the following topics:

- **Release Numbering Scheme in erwin Data Modeler** (see page 23)
- **Operating System Support** (see page 24)
- **System Requirements** (see page 25)
- **Administrative Privileges Required** (see page 26)
- **Supported Target Databases** (see page 27)
- **erwin Data Modeler Workgroup Edition Requirements** (see page 28)
- **erwin Data Modeler Navigator Edition Requirements** (see page 30)

### Release Numbering Scheme in erwin Data Modeler

Effective with r8, the release of this product is displayed in the *About erwin Data Modeler* dialog using the following release numbering scheme:
The first number always indicates the main (GA) release, the second number indicates the service pack number of the main release, the third number indicates the patch number of the main release or service pack (or both), and the fourth number indicates the build number of the product. For example, the preceding illustration indicates that the product level is r9, Build 5281. The release 9.8.00 in this dialog indicates r9 Service Pack 8, Patch Release 0, Build 5281.

If any documentation is updated after a main release, the cover page of the documentation always includes an edition number to indicate the release for which it was updated (see Release Numbers (see page 59) for more information).

Operating System Support

To run erwin Data Modeler it is recommended that you have the latest version of one of the operating systems (32-bit or 64-bit) installed:

- Microsoft Windows Server 2008 SP2, R2
- Microsoft Windows 7 SP1
- Microsoft Windows 8.1
- Microsoft Windows 10
- Microsoft Windows Server 2012, R2
- Microsoft Windows Server 2016

**Note:** erwin Data Modeler 32-bit (these notes do not apply to the 64-bit version of erwin Data Modeler) is fully compatible with 64-bit operating systems, except for the following known issues:

64-bit database drivers and clients will not work with erwin Data Modeler 32-bit. The workaround is to use 32-bit database drivers and clients even if running in the 64-bit operating system environment.

Running the erwin Data Modeler 32-bit API in a 64-bit environment requires some changes to the workstation registry. For more information about changing the registry, see the erwin Data Modeler Workgroup Edition “Implementation and Administration Guide”.
System Requirements

You can use any of the following combinations to install erwin® Data Modeler, the Mart database, and the MartServer application:

- Install erwin Data Modeler, the Mart database, and the MartServer application on the same computer.
- Install erwin Data Modeler, the Mart database, and the MartServer application on different computers.
- Install erwin Data Modeler and the Mart database on one computer, and install the MartServer application on a different computer.
- Install erwin Data Modeler on one computer, and install the Mart database and the MartServer application on a different computer.

**Note:** Ensure that you always install the MartServer application on the Windows operating system.

This topic includes the system requirements for the computers on which you plan to install erwin Data Modeler, the Mart database, and the MartServer application.

The following requirements must be met or exceeded for erwin Data Modeler to install and run correctly:

- Microsoft-based workstation, Intel Dual Core processor or equivalent
- 5 GB available hard drive space
- 4 GB RAM minimum; more is recommended for larger models
- DVD-readable device (only if installing from DVD media)

**Note:** The minimum screen resolution supported is 1024 x 768. If your screen resolution is less than the minimum supported, some portions of the screen will not be visible.

The following requirements must be met or exceeded for the computer on which you install the MartServer application:

**Hardware requirements (based on physical hardware performance, not a virtual environment):**

- 2 GHZ or higher dual core processor
- 4 GB RAM (8 GB or more for large marts)
- 4 GB of disk space or more as required to support your specific mart

**Operating system requirements:**

- Microsoft Windows Server 2008 SP2, R2
- Microsoft Windows 7 SP1
Administrative Privileges Required

- Microsoft Windows 8.1
- Microsoft Windows 10
- Microsoft Windows Server 2012, R2
- Microsoft Windows Server 2016
- Microsoft .NET Framework 3.5 and above
- All current Microsoft Windows critical updates

Database:
- Microsoft SQL Server 2012, 2014, 2014 SP1, 2016, 2016 SP1
- Oracle 10g or 11g/12c or the certified version 12c R2
- SAP Adaptive Server Enterprise (ASE) 15.x or 16
- PostgreSQL through V9.6.2 and certified on 9.6.5

The erwin Mart Administrator web client meets the following requirements:

Supported browsers:
- Microsoft Internet Explorer v10® or newer
- Mozilla Firefox® v30 or newer
- Google Chrome v30 or newer
- Apple Safari 6 or newer

Administrative Privileges Required

The installation process for erwin Data Modeler writes to the registry and system folders. Therefore, the person installing, upgrading, or removing erwin Data Modeler must have Administrative privileges. If you run an install without Administrative privileges, all files may not be installed or upgraded, and users can encounter problems when running the software.
Supported Target Databases

The application supports or is compatible with the following target databases:

- DB2 for i (5.x/6.x/7.x)
- DB2/LUW (9.5, 9.7/10.x)
- DB2 for z/OS (8.1, 9.1/10/11)
- Hive (2.1.x)

Note: Refer to the Limitations in Hive topic.

- Informix (10.x/11.x/12.x)
- MySQL (5.x)
- ODBC/Generic (2.x, 3.x)
- Oracle (10g, 11g/12c)
- PostgreSQL 9.6
- Progress (9.x/10.x/11.1)
- SAS (stabilized support)
- SQL Azure
- SAP ASE 15.x/16
- SAP IQ (15.x/16)
- Teradata Database (14.10, 15.x/16.10)

Note: The erwin Data Modeler 64-bit version is not verified for the Progress 9.x/10.x database.
Limitations in Hive

The following list summarizes the limitations in pure Hive (connection to Hive database directly):

- Reverse engineering from database processing is slow due to the absence of system tables. The required information is retrieved by manual parsing methods instead of a query language.
- User-defined functions are not supported.
- Retrieval of version information using the Hive command is not supported.
- A few index properties, such as deferred rebuild option, idxProperties, and Null Defined As are not supported.

erwin Data Modeler Workgroup Edition Requirements

If you plan to use erwin Data Modeler Workgroup Edition, review the following requirements to ensure your workgroup environment is set up properly.

More information:

Administrator Server System Requirements (see page 28)
DBMS Requirements (see page 29)
Client Workstation Requirements (see page 30)

Administrator Server System Requirements

The disk space required for the administrative files used to create and manage the database is separate from the disk space required to accommodate models on the server where the database is located. Greater CPU speed, and more RAM and disk space result in better performance.
DBMS Requirements

Before you install erwin Data Modeler to use a MartServer in a workgroup environment, ensure that you are using a supported DBMS as your host server. This release supports the following host DBMSs:

- Oracle 10g and 11g/12c or the certified version 12c R2
- Microsoft SQL Server 2012, 2014, 2014 SP1, 2016, 2016 SP1
- PostgreSQL through release 9.6.2, certified on PostgreSQL 9.6.5
- SAP Adaptive Server Enterprise (ASE) 15.0 through 15.7 and SAP ASE 16, or the certified version, SAP ASE 16 SP02

To create, update, or delete a mart in erwin Data Modeler Workgroup Edition, you must have the following database rights:

- For Microsoft SQL Server 2012, 2014, 2014 SP1, 2016, and 2016 SP1 you must be the database owner (dbo).

  **Notes:**
  
  The dbo is no longer required to have the sysadmin role.

  The SQL Server 2012, 2014, 2014 SP1, 2016, and 2016 SP1 TRUSTWORTHY database property is no longer required for the mart. After you install this product, you can optionally reset this property to OFF.

- For Oracle, you must be the database schema owner and have the DBA role.

Before you install Mart on the server, verify that the DBMS environment is prepared for the installation, and that the server system requirements meet at least the minimum specifications. At least one user with administrative privileges is available on the DBMS.

**Note:** The dbo role for Microsoft SQL Server or SAP ASE is necessary only during the installation or upgrade. You can strip the installer of the dbo role after the installation or upgrade is complete.

For more information about preparing the DBMS environment, see the erwin Data Modeler Workgroup Edition Implementation and Administration Guide.
Client Workstation Requirements

You must install erwin Data Modeler on each client workstation that needs to access the Mart Server to connect to the Mart. It is recommended that client workstations have at least 2 GB of RAM.


Note: In a workgroup environment, erwin Data Modeler can connect to the Mart Server with the same release version.

erwin Data Modeler Navigator Edition Requirements

If you plan to use erwin Data Modeler Navigator Edition, review the following requirements to ensure your environment is set up properly.

Support for erwin Data Modeler Navigator Edition

erwin Data Modeler Navigator Edition is enabled for use with a mart-enabled version of erwin Data Modeler (Workgroup Edition). Consult with your mart administrator for a GUEST user permission to access models in erwin Data Modeler Workgroup Edition.

You must use a supported DBMS. This release supports the following host DBMSs:

- Oracle 10g and 11g/12c or the certified version 12c R2
- Microsoft SQL Server 2012, 2014, 2014 SP1, 2016, and 2016 SP1
- PostgreSQL through release 9.6.2, certified on PostgreSQL 9.6.5
- SAP Adaptive Server Enterprise (ASE) 15.0 through 15.7 and SAP ASE 16, or the certified version SAP ASE 16 SP02
Chapter 4: Installation Considerations for erwin Data Modeler Workgroup Edition

Review the following installation considerations before installing the product. For more information about the installation process for a workgroup environment, see the erwin Data Modeler Workgroup Edition Implementation Guide.

This section contains the following topics
- erwin Data Modeler and Mart Release Numbers (see page 31)
- Microsoft SQL Server 2005 onward Permissions (see page 31)
- Specify Use of Foreign Characters With Microsoft SQL Server (see page 32)

erwin Data Modeler and Mart Release Numbers

You must install a Mart or must upgrade to a Mart that is of the same release number as erwin DM. For example, install or upgrade to an r9.5.0 Mart when you install or upgrade to erwin DM r9.5.0. Using different versions of erwin DM and Mart may lead to unexpected results including corruption of the Mart database or the models. Therefore, we recommend that you install the same release of the Mart and erwin DM.

Microsoft SQL Server 2005 onward Permissions

For SQL Server 2005 onward, you only need to have public assigned to save to the mart. However, when the repository is on a SQL Server 2005 or above instance, you need to have the bulkadmin permission designated as well. The ability to do bulk inserts (which was permitted by public, previously) is no longer part of the public permission. You must explicitly define this permission or when you attempt to save a model to a new mart instance created using a SQL Server 2005 or above database, an error "You do not have permission to use the bulk load statement." is returned.
Specify Use of Foreign Characters With Microsoft SQL Server

For Microsoft SQL Server 2008, and 2012, 2014, 2014 SP1, and 2016 modify your registry settings to have certain foreign language characters in your models recognized.

Follow these steps:

1. Click Run on the Start menu.
2. Enter regedit.
   The Registry Editor opens.
3. Verify or add the following registry entry:
   [HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\MSSQLServer\Client\DB-Lib]
   "AutoAnsiToOem"="ON"
   "UseIntlSettings"="ON"
4. Click File, Exit.
   Your configuration is set to recognize foreign language characters in your models.
Chapter 5: Installation Considerations for erwin Data Modeler Navigator Edition

Review the following installation considerations before installing the product. See the erwin Data Modeler Navigator Edition User Guide for more information about the installation process.

This section contains the following topics

Silent Install (see page 33)

Silent Install

This product does not provide an unattended or silent install.
Chapter 6: General Considerations for Using erwin Data Modeler Workgroup Edition

The following sections contain general information you should know before using erwin Data Modeler in a workgroup environment.

This section contains the following topics

Model Display in the Difference Reconciliation Dialog (see page 35)
Uninstalling erwin Data Modeler Workgroup Edition (see page 35)

Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

Note: In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

Uninstalling erwin Data Modeler Workgroup Edition

You can use the Windows uninstall utility to uninstall erwin Data Modeler. However, when you uninstall erwin Data Modeler in a workgroup environment, the mart database remains intact. To remove the database from your computer, delete the mart database first, and then uninstall erwin Data Modeler.
Chapter 7: General Considerations for Using erwin Data Modeler Navigator Edition

The following sections contain general information you should know before using erwin Data Modeler Navigator Edition.

This section contains the following topics

- Model Display in the Difference Reconciliation Dialog (see page 37)
- Help Files (see page 37)

Model Display in the Difference Reconciliation Dialog

In a workgroup modeling environment, two users may check out and make changes to the same model. The first user may make changes to the model and save the changes to the mart. When the second modeler makes changes and saves them to the mart, the Difference Reconciliation dialog is displayed. You use features in this dialog to view the differences on the object level, the more detailed property level, or search the text of the comparison lists.

Note: In the Difference Reconciliation dialog, the model in the left pane is the current model that you are checking in to the mart. The model in the right pane is the version of the model already in the mart.

Help Files

The context sensitive online help in erwin Data Modeler Navigator Edition is identical to the online help in erwin Data Modeler. This means that the online help may discuss capabilities such as saving a model that is not possible in the erwin Data Modeler Navigator Edition product.
Chapter 8: Known Issues

This section contains the known issues that you should review before using the application. Apart from the listed issues, refer the erwin r9.8 Beta Known Issues document that you received with the erwin Data Modeler (DM) installer.

This section contains the following topics

- **Unhandled Exception for Mart Upgrade Utility** (see page 39)
- **SQL 1105 Error** (see page 39)
- **API Functions not Working for SAP ASE Mart** (see page 40)
- **Model and Version Name Limit on Oracle** (see page 40)
- **.Net Requirement** (see page 40)
- **Report on Glossary Words Includes Extra Characters** (see page 40)
- **Updating Profile Description from Notepad** (see page 40)
- **Unwanted Result Rows in Report** (see page 40)
- **DSM Logical to SQL Server 2012** (see page 41)
- **Report Designer Functions for a Large Model** (see page 41)
- **Subject Area Picture Report not Generated** (see page 41)
- **Incorrect UDP in UDP Report** (see page 41)
- **Invalid Column Node for DB2 LUW Model in View Report** (see page 42)
- **Mart Server Name in Korean** (see page 42)
- **Generating Reports with Korean Characters in User Name** (see page 42)
- **Error While Creating a Profile Using Special Characters in Mart Administrator** (see page 43)
- **File IO: For a Parent or Child Table with Multiple Child Tables, Other Child FK Attributes are Highlighted on Mouse Hover on One Relationship** (see page 43)
- **Owner Name not Displayed while Sorting a Guided Editor’s list of Objects** (see page 43)

**Unhandled Exception for Mart Upgrade Utility**

Support for 32-bit Mart Upgrade Utility has been dropped for SQL Server 2008 in Microsoft Windows 10. Hence, while using the 32-bit variant of the Mart Upgrade Utility, an unhandled exception is thrown and the upgrade wizard closes unexpectedly.

**SQL 1105 Error**

When you are upgrading to the current release on Microsoft SQL Server in a workgroup environment, during the mart conversion process, you may get the message "Sql 1105" if you run out of free hard disk space during the process.

Stop the conversion process, and either free or add hard disk space. Delete the already created r9 tables and then re-attempt the conversion.
API Functions not Working for SAP ASE Mart

When SAP ASE is used as the Mart database and the Mart is accessed through API, the LocateMartDirectory and LocateMartDirectoryUnit functions do not work properly.

Model and Version Name Limit on Oracle

In a workgroup environment, when you save a model to an Oracle mart, the model name must be less than 130 characters. If you exceed the 130 character limit, the model will not save. Because the version name is derived from the model name (for example, <ModelName>:<version number> by <UserName> on <VersionCreateDate>), you should use model names considerably less than 130 characters in length to avoid problems with saving a model version.

.Net Requirement

The current release requires .NET 4.5.2 to be installed on your system. If you do not have it installed, the erwin Data Modeler installation will attempt to install it. After you install the .NET framework, you must restart the computer to make the changes take effect.

Report on Glossary Words Includes Extra Characters

Suppose a report is generated on a model that includes an NSM object. If the glossary words are included in the report, extra characters appear for all glossary words.

Updating Profile Description from Notepad

In the erwin Mart Administrator Profile Management page, suppose the description is copied and pasted from a Notepad file and is saved. The updated description displays syntax (\n) as well.

Unwanted Result Rows in Report

In a Subject Area report, suppose the Subject Area name is included in the report and the diagram name is specified at run time. The report lists all Subject Areas instead of the Subject Area that corresponds to the selected diagram.
DSM Logical to SQL Server 2012

Suppose a Logical/Physical SQL Server 2012 model is attached with a DSM object that is active. Suppose a new Logical Definition for the Number domain is created and mapped to SQL Server 2012 and Date is selected for domain. If the newly created Logical Definition is applied to a column in a model, and if the physical view is seen, the data type is still displayed as Number.

Report Designer Functions for a Large Model

Generating reports is a memory intensive process and when the data set is very large, the process uses the maximum memory. When the maximum memory is consumed, a warning message informs you that the application might stop responding if you continue processing the report. If you choose to continue to run the report and the memory is completely used, the program might stop responding. If you choose not to continue, the report execution is terminated.

To resolve this problem, you can generate multiple small reports with fewer properties.

Subject Area Picture Report not Generated

There is a limitation on the size of a diagram report that you can generate—the maximum size is 1900 x 1440. Suppose you create a Subject Area report for a large model using Report Designer, and export the report to HTML. If you click the diagram in the HTML report, it does not open.

To resolve this problem, reduce the zoom level of the model to reduce the picture size and then generate the report.

Incorrect UDP in UDP Report

Suppose you want to generate a report on the UDPs using Report Designer. Suppose you have already created a UDP report template and generated the report for a different model. If you close the model, open another model, and use the same template to generate the UDP report, then the report includes the UDP name from the previous model. In the result grid, the column heading shows the UDP name of the previous model, while the UDP value is of the current model. In addition, the properties of the Report Explorer also shows the UDP name of the previous model. However, the Report Properties dialog shows the correct UDP name.
Invalid Column Node for DB2 LUW Model in View Report

In a DB2 LUW model, suppose a nickname table and a view exist and a Column Option level UDP is added to a column. If a View report is generated using the Report Designer, the Column Option node is available for View. If a user selects the Column Option node, the UDP is not included in the report for the selected column.

Mart Server Name in Korean

Suppose that you provide the Mart Server machine name in the Korean language (Korean characters) and configure the Mart Server. If you try to connect to the Mart from erwin DM and you provide the Korean language name for Server Name, the following message appears:

The client application version is different from the Mart Server version. Install the same version of the application and the Mart Server and then try.

If you try to log in to erwin Mart Administrator by using the Korean language name, it does not display.

Generating Reports with Korean Characters in User Name

Suppose that you have initialized a Mart with a user name that has Korean characters. You connect to the Mart with this user name and generate a report on Mart users (click Tools, Mart Reports, Global Reports, Users). The report is not generated and the message, You can not connect. Incorrect log on parameters is displayed. (The actual message is displayed in the Korean language. The message provided here is the translated message.)
Error While Creating a Profile Using Special Characters in Mart Administrator

When you create a profile in Mart Administrator using special characters such as !@#$%^&*()_+={}:"-<>?|/.,;'\, and space, you will get one of the following error messages repeatedly and the Mart Administrator hangs.

Illegal Group

or

500 The call failed on the server; see server log for details

or

String index out of range:1

To avoid this error, create a profile without using the special characters. When the Mart Administrator hangs, refresh the Mart Administrator.

File IO: For a Parent or Child Table with Multiple Child Tables, Other Child FK Attributes are Highlighted on Mouse Hover on One Relationship

If one parent/child entity has multiple children with different relationship lines, the migrated attributes in all child tables are highlighted on hovering the mouse on any one of the relationship lines.

For r7.x models being upgraded to r9.8, the work around for this is as follows:

On the Model Upgrade Wizard, go to the Subject Area tab and select the "Apply a default theme for all the diagram" check box and continue with the process.

Owner Name not Displayed while Sorting a Guided Editor's list of Objects

For Hive and Teradata the owner is a database and not an owner or schema. Therefore, while attempting to sort a guided editor (for example, Subject Area Editor) list of objects by Owner_Name + Object_Name, the owner name is not displayed.
Chapter 9: Fixed Issues

This section includes the list of issues that is fixed.

This section contains the following topics

Issues Fixed in this Release (see page 46)
Issues Fixed in this Release

The following issues have been fixed in this release:

1. **Problem No.: Issue No.:00507426: - Cannot open a model, either externally or from Mart**
   For some data modeler files, erwin Data Modeler (DM) freezes or crashes when files are opened and loaded into erwin DM.

2. **Problem No.: Issue No.:475771: - Index Partition boundaries not converted from V7 Model**
   When converting a DB2 model from V7.3 to R8 or R9 any boundaries set in the V7.x model for Index Partitions are lost.

3. **Problem No.: Issue No.:463359: - Physical only domains copied to table (as column) show up as attribute in Entity**
   Physical only domain(s) copied to Table, become a column. When we switch to the logical side, they show up as attributes in the Entity.

4. **Problem No.: Issue No.:497738: - Reverse engineer IBM DB2/LUW 9.x, some columns default value “WITH DEFAULT” and datatypes like DECIMAL, INTEGER, DATE, TIMESTAMP reverse engineered as DEFAULT 0, DEFAULT 0.0**
   Customer expects to see B2B_QT_ID INTEGER NOT NULL WITH DEFAULT. But erwin Data Modeler displays B2B_QT_ID INTEGER NOT NULL DEFAULT 0.

5. **Problem No.: Issue No.:00487154: - Selection of columns hangs in a table with 300 to 400 columns**
   Opening a customer’s model with large table of more than 948 columns and performing any operations on columns causes erwin Data Modeler to freeze.

6. **Problem No.: Issue No.:00487891: - Model gets stuck at the bottom of the screen and cannot be move to any position**
   Model gets stuck at the bottom of the screen and cannot be move to any position.

7. **Problem No.: Issue No.:415928: - DB2 LUW 10.x data model, domain with default not retaining the value for a new column**
   Domain with default does not retaining the value for a new column

8. **Problem No.: Issue No.:00507209: - MIMB log application error**
   MIMB log application error when export to Excel

9. **Problem No.: Issue No.:5803: - Alter script - table rename invalidates foreign key constraints**
   Alter script - table rename invalidates foreign key constraints

10. **Problem No.: Issue No.:00515545: - OpenSSL patch for 9.6 and 9.64**
    OpenSSL higher version is not supported with erwin Data Modeler
11. **Problem No.: Issue No.:00517494: - Teradata Varchar compression is not supported**
   For Teradata, 13.10 and later 'Compress' is allowed for Variable data types e.g. VARCHAR(). erwin Data Modeler allows 'Compress' for other data types but does not allow it for VARCHAR() with the error 'ESX-190833: The Compress property is not compatible with a UDT, LOB, or a variable length Datatype.'

12. **Problem No.: Issue No.:486910/00317985: - Previous Hotfixes not included in 9.64.02**
   Hotfix-dll's for various issues were not included in 9.64.02.

13. **Problem No.: Issue No.:00593470: - Model stored in the mart cannot be opened**
   A model stored in the mart cannot be opened and causes erwin Data Modeler to crash.

14. **Problem No.: Issue No.:5316: - Bulk editor selection does not persist**
   Multiple selections in the Bulk Editor do not persist.

15. **Problem No.: Issue No.:00458337: - Generic ODBC 3.0 Datatype Standards not mappings**
   Changes made in the database standards are not applied to the logical to physical mapping due to improper ODBC version mappings.

16. **Problem No.: Issue No.:00515936: - DB2 z/OS Index Partitions lost on RE - need fix for 9.64.1 - 64-bit**
   DB2 z/OS Index Partitions are lost on reverse engineering.

17. **Problem No.: Issue No.:00529792: - Drop foreign key constraint statement fires before table rename**
   The "Drop foreign key constraint" statement is fired before renaming the table works.

18. **Problem No.: Issue No.:5724: - ERwin 9.64 Abbreviation model template - ERwin application has stop working issue**
   Binding the EnterpriseAbbreviation Template File to existing or new models, and then performing actions causes erwin to crash.

19. **Problem No.: Issue No.:5911: - erwin Data Modeler crashes**
   While checking data models after the R8.2 -> R9.6.4.2 upgrade, erwin Data Modeler crashes when flipping between logical and physical view on certain subject areas in a model.

20. **Problem No.: Issue No.:6126: - NSM not abbreviating**
   Irregular abbreviation is observed in NSM model.

21. **Problem No.: Issue No.:7692: - r9 mart-model open dialog lists models in a library slowly**
After selecting a library, the model open dialog does not display all the models in the selected library promptly.

22. **Problem No.: Issue No.:5636: - DB2 for i Gen option for relationships ignored FK constraints in Create**

   For DB2 for i, even though the Generate option is unchecked for the relationship between two tables and Referential Integrity option for FK constraints is set to Create, an FK constraint is included.

23. **Problem No.: Issue No.:7102: - Nulltype Error in Mart level report in Report Designer**

   Null values are retrieved incorrectly in report designer.

24. **Problem No.: Issue No.:7683: - Complete Compare does not generate script when changing only members of an index (DB2/zOS)**

   During Complete Compare, when adding a new member to an existing index import or export, the “Right Alter Script/Schema Generation” gives an error message “No schema to generate”.

25. **Problem No.: Issue No.:8021: - Duplicate Domains created when synchronizing with template**

   New domains are created in a model while binding Template.erwin file to the model.

26. **Problem No.: Issue No.:9105: - Bulk Editor fails when pasting from Excel**

   Copying bulk editor data from an Excel spreadsheet to Bulk editor gives an error.

27. **Problem No.: Issue No.:9825/00474910: - erwin Data Modeler crashes when saving the model as erwin XML**

   When a model is imported as a Logical only model from IDA to erwin Data Modeler, it crashes when saving the model as erwin XML (either min or standard).

28. **Problem No.: Issue No.:9279: - erwin V9.7 model save as 9.5, cannot open in 9.6, erwin crashes**

   When a model created in erwin Data Modeler V9.7 is saved as a V9.5 model, opening the model in V9.5 or V9.6 causes erwin Data Modeler to crash.

29. **Problem No.: Issue No.:10586: - Model compare - unexpected error**

   Attempting a complete compare on any model causes an unexpected error, "An unexpected and serious condition occurred in the application. Please contact erwin Technical support with reproduction steps to resolve this problem".

30. **Problem No.: Issue No.:10865: - r8.2 model converted to r 9.7 crashes during Complete Compare**

   After converting erwin 8.2 model(s) to erwin 9.7 and comparing those models with their target DBMS (Oracle or SQL Server), erwin crashes after selecting compare.

31. **Problem No.: Issue No.:5635/00596271: - Relationship lines not maintained when switching from logical to physical**
Relationship lines are not maintained after selecting 'Reset Relationship Path' when switching model views (for example, logical to physical).

32. **Problem No.: Issue No.:5761: - Premature end of file Harvesting ERwin Mart model using ERwin Web Portal**

   During Web Portal harvesting mart model from Mart Server, the connection to the Mart Server fails prematurely.

33. **Problem No.: Issue No.:10866: - Problem with XML Repository format**

   Validating an XML repository against erwinSchema.xsd throws an error.

34. **Problem No.: Issue No.:11169: - HTML Report does not generate when all diagrams with the word 'logical' are checked on in the Select Subject Area and Diagram window**

   HTML Report does not generate when all diagrams with the word 'logical' are checked on in the Select Subject Area and Diagram window.

35. **Problem No.: Issue No.:10538: - Report designer export pdf file the materialized views and views are not clickable to show the details**

   While using report designer exported PDF file, the materialized views and views are not click-able to show the detail.

36. **Problem No.: Issue No.:11386: - Model problem - Unable to mark entities as logical-only**

   Marking an entity as Logical Only is not allowed.

37. **Problem: - Getting warning message when copying an entity from one model to another model which having theme**

   A warning message is displayed while copying an entity from one model to another model that has a theme attached.

38. **Problem No.: Issue No.:10826: - Concurrent modeling problem**

   Concurrent modeling does not allow one of the users to import/export changes from the other user.

39. **Problem No.: Issue No.:10999: - Parent Domain value in Mart Report for Entities_Tables**

   An attribute that has a custom domain set is shown as <default> in the mart report.

40. **Problem: - Text box takes extra space and overlaps the drawing line when converting r7 to r9 model**

   Text box takes extra space and overlaps the drawing line when converting r7 model to r9.

41. **Problem No.: Issue No.:5756: - Unable to find AD Group when typing 4 characters**

   When entering a search string, the mart administrator fails to display any AD groups unless the user types 4 or less characters from the start of the group name.
42. **Problem: - Relationship lines bend at wrong location when converting model from r7 to r9.64**
   When converting a model from r7 to r9, some bend points of relationship lines are changed and cause overlapping lines in the diagram.

43. **Problem No.: Issue No.:11981: - Element "UDP_Definition_Groups" appears twice on UDP.XSD file**
   The "UDP_Definition_Groups" element appears twice on UDP.XSD file.

44. **Problem No.: Issue No.:10324: - Filter on Action Log not working**
   Filter in action log is not working as expected. If we deselect everything and select only attributes in filter, it generates log for all properties added to the model.

45. **Problem: - Issue No.:11562: - Mart Admin Click the link 'Settings' ! Encountered error while trying to retrieve options**
   In Mart Administrator, clicking the Settings link throws an error, "Encountered error while trying to retrieve options".

46. **Problem No.: Issue No.: 10827: - Korean - Copy and pasting a string pastes at a wrong location.**
   For Hungal (Korean) OS, with erwin Data Modeler, copying and pasting a string pastes it at a wrong location.

47. **Problem No.: Issue No.: 11282: - Open, wrong erwin model opens after sorting model names in the Open dialog**
   In the Open dialog box, after sorting model names, incorrect erwin model opens.

48. **Problem No.: Issue No.: 12292: - Merged alter table statements for DB2 LUW**
   Option to Merge Alter Table Statements for DB2 LUW is not available.

49. **Problem No.: Issue No.: 13573: - r9.7 32-bit OS Complete Compare - imports many tables + Q_QA_GR_STR_FULFILMENT_V Crashes**
   While doing a complete compare and resolving differences, if a large number of tables are imported along with the Q_QA_GR_STR_FULFILMENT_V table from right to left model, erwin Data Modeler crashes.

50. **Problem No.: Issue No.: 7813: - Reverse engineering default values wrong on DB2 LUW**
   For DB2 LUW, reverse engineering a .ddl with default values and then forward engineering it with default values gives mismatched output from the original .ddl.

51. **Problem No.: Issue No.: 13830: - New model opened based on a template is saved as Template by default**
   While creating a model using a template and then saving the model using Save or Save As, the model type is a template instead of model by default.

52. **Problem: - Relationship line does not align properly**
   Some relationship lines are not aligned to center.
53. **Problem No.: Issue No.: 13623:** - In UDP editor, the default designator ‘~’ no longer works properly
   
   In UDP editor, the default designator ‘~’ does not work properly.

54. **Problem No.: Issue No.: 9664:** - Need to display qualified schema name alongside table name in model explorer
   
   The qualified schema name is not displayed alongside the table name in the Model Explorer.

55. **Problem No.: Issue No.: 8787:** - Mart report showing duplicated UDP headings after editing
   
   Duplicate UDP headings are displayed in Mart report after editing.

56. **Problem No.: Issue No.: 8789:** - Implicit Saving of Option set
   
   The changes for the Option Set should not be made implicitly.

57. **Problem No.: Issue No.: 10820:** - Data type change for Mart Model does not show differences in Review Changes
   
   Data type change for Mart Model does not show differences in Review Changes.

58. **Problem No.: Issue No.: 13660:** - SCAPI cannot open model if Library or Model named is in Korean language
   
   A Model cannot be opened from Mart using API, if any of the parameters; for example, Mart Name, Library Name, Model Name, etc., are in Korean Language.

59. **Problem No.: Issue No.: 13947:** - The line color of one of the super / sub type relationships has been changed after upgrading from 7.3.x to 9.64.1
   
   The line color of one of the super/sub type relationships has been changed after upgrading from 7.3.x to 9.64.1.

60. **Problem No.: Issue No.: 5821:** - Model corruption - cannot merge two models
   
   Merging two models leads to model corruption.

61. **Problem: RE UDB Column ""WITH DEFAULT""**
   
   For DB2 LUW, reverse engineering as WITH DEFAULT should be supported.

62. **Problem No.: Issue No.: 8985:** - FE support for Coded Character Sets in DB2 for i - regression
   
   In DB2 for i, for variable Data Types, e.g. VARGRAPHIC, the Character Code Set ID (CCSID) option is hidden.

63. **Problem:** - empty or blank Valid_Value object is displayed as Valid_Value_xxx
   
   While doing reverse engineering, empty spaces in validation rule are emitted incorrectly from the database.

64. **Problem No.: Issue No.: 15883:** - Unique clause missing in PK Index syntax for Teradata 14.x
   
   The Unique clause is missing in primary key index for Teradata 14.x
<table>
<thead>
<tr>
<th>Problem No.: Issue No.</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>14410: - LO models with UDPs cannot be saved as XML</td>
<td>Model Template prevents saving a model as XML. Also, if a model is LO and has any UDP, it cannot be saved as an XML file.</td>
</tr>
<tr>
<td>15839: - Model crash during CC</td>
<td>While doing a complete compare-model to model compare, erwin Data Modeler crashes during the compare process. The model target DBMS is Teradata 14.10.</td>
</tr>
<tr>
<td>16187 - Model crash during CC</td>
<td>In erwin Data Modeler 9.7 64-Bit, in Model to Model compare, any model with a Reverse Engineer SQL Server 2012,2014, 2016 .erwin model crashes when 'Compare' is selected. Any two existing .erwin models do compare. However, when comparing the RE model with a blank model and importing all objects - that blank model .erwin continues to crash.</td>
</tr>
<tr>
<td>17082: - Lost_Code_because_of_Wildcard_with_dash -- incorrect Generation of View Code</td>
<td>If a View syntax of a User Defined SQL has a dash after the Percent symbol (e.g. %_), even if it is within single quotes, erwin tries to parse it and misses a lot of code in Forward Engineering</td>
</tr>
<tr>
<td>12992: - How to tell Mart Server to use port 8090 in IIS</td>
<td>It is not clear how to configure Mart Server to use a port (8090) in IIS other than the default (80).</td>
</tr>
<tr>
<td>17898: - Running r9.7 in a Chinese Windows version machine, 64-bit, is unable to open some of the models</td>
<td>While running r9.7 in a Chinese Windows version machine, 64-bit, unable to open some of the models. An error, &quot;Encountered an improper argument&quot; is displayed.</td>
</tr>
<tr>
<td>13377: - ERWIN 9.7 - LDAP -Using erwin, domain user cannot login to mart</td>
<td>LDAP -Using erwin, domain user cannot login to mart. A message, Invalid user ID or password. Please try again to login, is displayed.</td>
</tr>
<tr>
<td>355637: - Connect Annotation to Entity fails</td>
<td>Attaching an annotation to an entity fails.</td>
</tr>
<tr>
<td>460174: - Can't generate ALTER script from CC for new imported tables</td>
<td>After performing complete compare, export some table from left to right. There is no &quot;create table or alter table&quot; DDL statement generated.</td>
</tr>
<tr>
<td>20833: - Remove entity 'worker' from Subject Area and erwin crashes, erwin Application has stopped working</td>
<td>Removing the 'worker' entity from a subject area causes erwin Data Modeler to crash.</td>
</tr>
</tbody>
</table>
75. **Problem No.: Issue No.: 19910**: Model saved from 9.7 to 9.64.02, the file will not open in 9.64.02
   A model saved from 9.7 to 9.64.02 does not open in 9.64.02 and causes erwin Data Modeler to crash.

76. **Problem No.: Issue No.: 10586**: Model compare - unexpected error
   When attempting to do a Complete Compare model, any model or a blank model, clicking on 'Compare' throws an unexpected error.

77. **Problem No.: Issue No.: 11193**: erwin Complete Compare Failure and Abend - model specific problem
   erwin 9.7 crashes when comparing the two models. However, it does not crash while comparing either model with blank model.

78. **Problem No.: Issue No.: 16589**: RE from DB2 for i misses some relationships - works fine from script
   Reverse engineering from DB2 for i does not bring in all relationships.

79. **Problem No.: Issue No.: 13377**: LDAP - Using erwin, domain user cannot login to mart
   LDAP - Using erwin, domain user cannot login to mart

80. **Problem No.: Issue No.: 14274**: 9.7 64-bit mart - SQL Server - two users save changes to mart, slow performance
   Incremental save operation is slow and it hampers the performance.

81. **Problem No.: Issue No.: 13879**: Active Directory -  ! Encountered error while searching group
   For user creation in Mart Server Administrator, Active Directory (AD) Groups are not found. An error is encountered.

82. **Problem No.: Issue No.: 13176**: An empty value in-between a List UDP can no longer be selected
   Although an empty value defined in the beginning works, an empty value in a List UDP defined in between can no longer be selected.

83. **Problem No.: Issue No.: 15531**: UDP value migrates from PK to FK and cannot be deleted
   When a value is added to a UDP for a PK column, it migrates to the FK column as well. Additionally, it cannot even be deleted - when deleted it repopulates itself.

84. **Problem No.: Issue No.: 16268**: Oracle - Alter Script misses PK/FK Index Storage Parameters
   For Oracle, when a FK is altered, which may also impact the PK, both PK index and FK index are also altered as expected. However, the Alter Script does not generate the Storage Parameters of both PK and FK indices.

85. **Problem No.: Issue No.: 15639**: Theme editor: How to turn off auto movement of relationship text in Vertical and Horizontal Alignment
In the Theme Editor, vertical and horizontal alignment features are working for the “Center” option alone. The other options do not work.

86. **Problem No.: Issue No.: 18137:** - Macros not expanding correctly if target database of model is Oracle
    
    Some macros do not work if the target database is Oracle.

87. **Problem No.: Issue No.: 19647:** - v9.7 OS 64 bit-Report Designer CSV text export puts a delimiter at the end of a record
    
    v9.7 OS 64 bit-Report Designer CSV text export puts a delimiter at the end of a record.

88. **Problem No.: Issue No.: 14274:** - Progress bar is seen when running report on Mart
    
    While running a report on Mart, a progress bar displayed.

89. **Problem No.: Issue No.: 10633:** - Hangul (Korean alphabet) is broken in headers in Report Designer
    
    Hangul (Korean alphabet) is broken in headers in Report Designer.

90. **Problem No.: Issue No.: 15438:** - LDAP - r96401 - encountered error while searching group
    
    In the Mart Administrator, searching an LDAP group throws an error.

91. **Problem No.: Issue No.: 19643:** - r9.7 - Mart, Open dialog takes 11 seconds to open
    
    The Mart, Open dialog takes longer than expected to open.

92. **Problem No.: Issue No.: 18767:** - Cloning / copying Classic Theme different from the original
    
    When cloning/copying the Classic Theme, the copy does not have all the original Theme's properties.

93. **Problem No.: Issue No.: 21395:** - Resetting AK Index members gives error "Encountered an improper argument"
    
    An error is encountered while doing the following:
    
    When changing the order of Alternate Key members on the Logical diagram, then going to the table Editor, clicking "Reset Order" under Index "Members" tab.
Chapter 10: Documentation

This section contains information about current product documentation.

This section contains the following topics

Documentation (see page 57)
Technical Documentation Series (see page 59)
Release Numbers (see page 59)

Documentation

The Bookshelf provided with erwin Data Modeler, which is installed by default, includes documentation for erwin Data Modeler Navigator Edition. You can open the Bookshelf in a web browser from the erwin Data Modeler Start menu.

The documentation provided on the Bookshelf includes the following guides:

<table>
<thead>
<tr>
<th>Deliverable Name</th>
<th>Format Provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add-In Manager Online Help</td>
<td>HTML</td>
</tr>
<tr>
<td>API Reference Guide</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Data Modeling Overview Guide</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>(This guide was earlier known as Methods Guide.)</td>
<td></td>
</tr>
<tr>
<td>Editing Forward Engineering Templates</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Implementation Guide</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Implementation and Administration Guide (Workgroup Edition)</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>(The individual Administration and Implementation guides are merged to create one guide--Implementation and Administration Guide.)</td>
<td></td>
</tr>
<tr>
<td>Installation Guide</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Metamodel Reference</td>
<td>HTML</td>
</tr>
<tr>
<td>erwin Data Modeler Online Help</td>
<td>HTML</td>
</tr>
<tr>
<td>erwin Mart Administrator Online Help</td>
<td>HTML</td>
</tr>
<tr>
<td>erwin Release Notes</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Mart Server Release Notes</td>
<td>HTML and PDF</td>
</tr>
<tr>
<td>Template Language and Macro Reference</td>
<td>PDF</td>
</tr>
</tbody>
</table>
Note: For more information about the erwin Data Modeler editions, see erwin Data Modeler Editions.

The bookshelf includes a new section named Roles. This section includes documentation relevant to the tasks performed by each role in HTML format. The Roles section includes the following documentation:

<table>
<thead>
<tr>
<th>Role</th>
<th>Deliverable Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Analyst</td>
<td>Applying a theme to a model</td>
</tr>
<tr>
<td></td>
<td>Changing the description of multiple objects</td>
</tr>
<tr>
<td></td>
<td>Applying data type standards</td>
</tr>
<tr>
<td></td>
<td>Applying naming standards</td>
</tr>
<tr>
<td></td>
<td>Creating a model</td>
</tr>
<tr>
<td></td>
<td>Generating or viewing reports</td>
</tr>
<tr>
<td></td>
<td>Compare models using Complete Compare</td>
</tr>
<tr>
<td></td>
<td>Create a Database Schema</td>
</tr>
<tr>
<td></td>
<td>How to Reverse Engineer a Database or a Script</td>
</tr>
<tr>
<td></td>
<td>How to Set Up erwin Web Portal and Publish Models</td>
</tr>
<tr>
<td>Data Architect</td>
<td>Upgrading Mart</td>
</tr>
<tr>
<td></td>
<td>Setting up concurrent licenses</td>
</tr>
<tr>
<td></td>
<td>Using a local license</td>
</tr>
<tr>
<td></td>
<td>Using concurrent licenses</td>
</tr>
<tr>
<td></td>
<td>Adding users</td>
</tr>
<tr>
<td></td>
<td>Installing and configuring Mart</td>
</tr>
</tbody>
</table>
The Template Language and Macro Reference (Template Lang and Macro Ref.PDF) technical document is provided on the Bookshelf and can also be accessed from the Tech Docs menu item on the erwin Data Modeler Start menu.

The erwin Data Modeler metamodel reference and overview technical documents are provided on the erwin Data Modeler Metamodel Reference Bookshelf. This Bookshelf is accessible from the Tech Docs menu item on the erwin Data Modeler Start menu. It contains an overview of the metamodel (erwin Metamodel Overview.PDF) and the metamodel object and property descriptions are provided in HTML format (Metamodel Reference).

To view PDF files, you must download and install the Adobe Reader from the Adobe website if it is not already installed on your computer.

Release Numbers

The release number on the title page of a document might not correspond to the current product release number; however, all documentation delivered with the product, regardless of release number on the title page, will support your use of the current product release. The release number changes only when a significant portion of a document changes to support a new or updated product release. For example, a document for r8 may still be valid for r8.1. Documentation bookshelves always reflect the current product release number.

Occasionally, we must update documentation outside of a new or updated release. To indicate a minor change to the documentation that does not invalidate it for any releases that it supports, we update the edition number on the cover page. First editions do not have an edition number.
Appendix A: Appendix

This section contains the following topics:

Third Party Software Acknowledgment (see page 61)

Third Party Software Acknowledgment

The following license agreements are available in the \\Bookshelf Files\\TPSA folder in the erwin Bookshelf:

- Tomcat 7.0.82 (\TPSA\Tomcat_7082.pdf)
- Oracle 11G JDBC driver 11.1.0.6 (\TPSA\O11G JDBC Driver.txt)
- Oracle (Sun) JRE 1.8.0_144

JRE

This Product is distributed with JRE from Oracle America, Inc. Oracle owns the Java trademark and all Java-related trademarks, logos and icons including the Coffee Cup (the “Java Marks”). Any source code provided is solely for reference purposes. Use of the Commercial Features of the JRE for any commercial or production purpose requires a separate license from Oracle. 'Commercial Features' means those features identified Table 1-1 (Commercial Features In Java SE Product Editions) of the Software documentation accessible at http://www.oracle.com/technetwork/java/javase/documentation/index.html. Oracle has provided additional copyright notices and information that may be applicable to portions of the JRE in the THIRDPARTYLICENSEREADME.txt file that accompanies the JRE files.